

**133.** A wide incident angle reflective broadband polarizer as in claim 116 wherein,

incident unpolarized infrared light is transmitted as circularly polarized light.

**134.** A wide incident angle reflective broadband polarizer as in claim 116 wherein,

an electric field is applied to the varying pitch helix cholesteric liquid crystal film to switch the film between a totally transmissive state and a circularly polarizing transmitting state.

**135.** A wide incident angle reflective broadband polarizer as in claim 116 wherein,

a first index matching adhesive binds the first varying pitch helix cholesteric liquid crystal film to the first constant pitch helix cholesteric liquid crystal film and a second index matching adhesive binds first constant pitch helix cholesteric liquid crystal film to the first homeotropic film.

**136.** A wide incident angle reflective broadband polarizer as in claim 116 wherein,

the film of claim 116 is broken up into fragments and used as a pigment.

**137.** A wide incident angle reflective broadband polarizer as in claim 119 wherein,

the film of claim 119 is broken up into fragments and used as a pigment.

**138.** A wide incident angle reflective broadband polarizer as in claim 120 wherein,

the film of claim 120 is broken up into fragments and used as a pigment.

**139.** A wide incident angle reflective broadband polarizer as in claim 116 wherein,

the wide incident angle broadband polarizer installed in a reflective cholesteric liquid crystal color filter display corrects for color distortions over large viewing angles.

**140.** A wide incident angle reflective broadband polarizer as in claim 119 wherein,

the wide incident angle broadband polarizer installed in a reflective cholesteric liquid crystal color filter display corrects for color distortions over large viewing angles.

**141.** A wide incident angle reflective broadband polarizer as in claim 120 wherein,

the wide incident angle broadband polarizer installed in a reflective cholesteric liquid crystal color filter display corrects for color distortions over large viewing angles.

**142.** A wide incident angle reflective broadband polarizer as in claim 116 wherein,

the wide incident angle broadband polarizer installed in a smart window corrects for color distortions over large viewing angles.

**143.** A wide incident angle reflective broadband polarizer as in claim 119 wherein,

the wide incident angle reflective broadband polarizer installed in a smart window corrects for color distortions over large viewing angles.

**144.** A wide incident angle reflective broadband polarizer as in claim 120 wherein,

the wide incident angle broadband polarizer installed in a smart window corrects for color distortions over large viewing angles.

**145.** A wide incident angle reflective broadband polarizer as in claim 116 wherein,

a wide incident angle broadband polarizer as in claim 116 with opposite handedness is attached to reflect all incident light.

**146.** A wide incident angle reflective broadband polarizer as in claim 116 wherein an electrically addressable  $\pi$ phase shifter is sandwiched between the wide incident angle broadband polarizer of claim 116 with one handedness and the wide incident angle broadband polarizer of claim 116 with either handedness such that all incident light is reflected when the  $\pi$ phase shifter changes the light incident thereon and transmits light when the  $\pi$ phase shifter is quiescent.

\* \* \* \* \*